

Preface

Previous Natural Gas Report

In 2001, the Energy Policy Division of the Washington Office of Trade and Economic Development completed a report titled *Convergence: Natural Gas and Electricity in Washington* that examined trends in the demand for and supply of natural gas for Washington and the Pacific Northwest (OTED 2001). As the report title suggests there was an emerging convergence between electricity and natural gas markets, created by the construction of and proposals for several thousand megawatts of new natural gas-fired electric generating capacity. The report reviewed the extreme changes in natural gas prices in 2000 and early 2001, caused in part by a sudden, large increase in consumption of natural gas for electricity generation. The report also examined the ability of the region's gas delivery system to meet the proposed new demand for natural gas-fired generation without adverse consequences for existing natural gas consumers.

Current Natural Gas Report

Several things have changed since the 2001 *Convergence* report. First, although several large natural gas-fired power plants have been built in the Northwest, many of the recently proposed power plants have been mothballed or canceled. Higher natural gas prices, a slowing economy, and reduced demand for electricity following the shuttering of the Northwest aluminum smelters were the primary causes of these project terminations. Accordingly, forecasts for natural gas demand growth in the power generation sector have been scaled back drastically. Demand forecasts for the residential, commercial and industrial sectors have also been reduced relative to forecasts from several years ago. The other change between the events surrounding the 2001 report and the current report is the occurrence of a second natural gas price spike in 2003. The second natural gas price spike occurred during a period of sluggish economic growth and a milder winter than the gas price spike of 2000-01. After the second price spike, it became apparent that a natural gas supply shortfall was developing in the United States and Canada, which was exacerbated by the increased demand for natural gas in the power generation sector.

Recognizing the continental nature of the natural gas market, the current report takes a broader look at the gas industry. Our primary areas of focus are presented below:

- A review of past and present trends in Washington's natural gas market;
- An evaluation of natural gas infrastructure and recent improvements;
- A presentation of natural gas reserves and resources for the United States, Canada and Mexico;
- A comparison and review of five natural gas supply and demand forecasts covering the period from 1999-2004;
- An evaluation of new sources of natural gas supply such as Arctic natural gas and liquefied natural gas (LNG);
- An examination of market factors affecting natural gas demand and price;
- Presentation of key policy issues and options at the state and national levels;
- Discussion of potential gas savings from energy efficiency and renewable energy programs.